

SOV/124-58-5-6178

Translation from: Referativnyy zhurnal, Mekhanika, 1958, № 5, p 160 (USSR)

AUTHORS: Matveyev, S.I., Trusov, L.P.

TITLE: Effect of Temperature Variations on Resistance to Creep (Vli-
yaniye kolebaniy temperatury na soprotivleniye polzuchesti)

PERIODICAL: V sb.: Ispytaniya i svoystva zharoprochn. materialov.
Moscow, Mashgiz, 1957, pp 46-60

ABSTRACT: The authors arrive at the conclusion that in the selection of
allowable stresses for the creep limit or the rupture strength
temperature variations can lower these limits up to 10-20% for
12MKh pearlite steel and 15% for austenite steel.
From the résumé

1. Steel--Creep 2. Steel--Temperature factors

Card 1/1

TRUSOV, L.P., kand. tekhn. nauk.

Using steam pipes and steam superheaters, made of E1257 steel, at the
Cherepet state-owned regional electric power station. Energomashinostroenie
4 no.8:20-25 Ag '58.
(Cherepet--Electric power plants)

Trusov, L.P.

137-1957-12-25415

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 351 (USSR)

AUTHORS: Trusov, L. P., Fedortsov-Lutikov, G. P., Mitrofanov, V. G.

TITLE: The IP-4M Machine for Determining Long-Time Tensile Strength Under Creep
(Mashina dlya ispytaniya na polzuchest'-dlitel'nyyu prochnost'
IP-4 M)

PERIODICAL: V sb.: Prochnost' metallov. Moscow, AN SSSR, 1956, pp 91-99

ABSTRACT: A description of design changes performed on the IP-2 testing machine in order to explore the simplest and the most reliable methods for testing metals at elevated temperatures. Specifications for the new testing machine IP-4 M (improved IP-2 model), developed at the TsNIITMash, are shown. Temperature regulation in the furnace of the IP-4 M is accomplished automatically by means of an EPD-17 potentiometer; in addition, the furnace is equipped with a dilatometric temperature regulator, which controls the electronic potentiometer and also regulates the temperature in the event of failure of the potentiometer or the thermocouple. A control panel ensures temperature regulation at 108 points. Temperature is measured by means of a PP-11 potentiometer of class 0.25, with a range of 0 to 71 mv. Jack switches of PD-6

Card 1/2

137-1957-12-25415

The IP-4M Testing Machine for Creep and Endurance Strength

type are employed in the thermocouple circuits. Automatic temperature compensation for the free terminals of thermocouples is accomplished by means of a special unit of the KT-54 type, group KhA. The mechanical system of the machine remained essentially unaltered. All component units of the IP-4 M machine have exhibited sufficient strength and reliability required for the experiments during long periods.

Z.F.

1. Metals-Tensile properties-Testing equipment
2. Metals-Creep-Testing equipment
3. Metals-Thermodynamic properties-Testing equipment

Card 2/2

TRUSOV, L.S., inzh.

Make bolder use of the shopless system of management. Rech. transp.
(MIRA 12:2)
18 no.1:22-23 Ja '59.
(Shipyards)

TRUSOV, L.S., inzh.

Make bolder use of inland transportation workers for repairing
ships. Rech.transp. 17 no.11:33-34 N '58. (MIRA 11:12)
(Inland water transportation--Employees)
(Ships--Maintenance and repair)

S/032/60/026/05/39/063
B010/B008

AUTHORS: Lyubchik, M. A., Trusov, L. P., Shur, D. M.

TITLE: Device for Programmed Tests of Heat-resistant Materials for Creep Strength

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 5, pp. 615-616

TEXT: A device (Fig. 1, Scheme) for programmed tests of heat-resistant materials for creep strength at changing temperature- and load conditions is described. The device is designed on the basis of a unit of the mass-produced machine of the TsNIIMASH design of type IP-4M. The individual technical data are mentioned. The electric circuit was worked out by V. I. Krizental'. The test sample (placed in the clamping jaw of the machine) is heated automatically by an electric furnace according to the program, and can also be cooled by compressed air. Loading is done by means of a weight which is displaced on a load beam. Programming of the experiment is done by an apparatus of type KEP-12/61². The 8 contacts are connected in series to an RPT-100 relay. The programming of the

✓ B

Card 1/2

Device for Programmed Tests of Heat-resistant Materials for Creep Strength

S/032/60/026/05/39/063
B010/B008

temperature change is carried out by a differential circuit, an EPD-12¹² ✓ B
potentiometer being used as a regulation device, and is controlled by
a self-recording instrument of type EPP-09²³. The loading mechanism is
directed by means of automatically operating switches. A thermogram
(Fig. 2) obtained with the instrument described is mentioned. There
are 2 figures.

Card 2/2

TRUSOV, M. D.

29080. TRUSOV, M. D. I MEDINSKIY, E. S. -- Izvlechenie okish magniya iz dolomitov.
Trudy Sredneaziat. industr. IN-TA, Vyp. 1, 1949, s. 11-25. -- Bibliogr: 13 nazyv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

TRUSOV, M., kand.med.nauk

"Dark adaptation of the eye" by B.G. Korobko. Reviewed by M. Trusov.
(MIRA 13:4)
Oft. zhur. 14 no.6:376-378 '59.
(EYE—ACCOMMODATION AND REFRACTION) (KOROBKO, B.G.)

BABKIN, S.I., kand.med.nauk; BELYAKOV, P.D., kand.med.nauk; TRUSOV, M.M.;
NESTERENKO, A.G.

Apparatus for the atomization of therapeutic solutions in the treatment
of burns. Khirurgia 35 no.7:138-139 Jl '59. (MIRA 12:12)

1. Iz nauchno-issledovatel'skogo instituta eksperimental'noy khirur-
gicheskoy apparatury i instrumentariya Ministerstva zdravookhraneniya
SSSR (dir. - M.G. Anan'yev).
(BURNS, therapy)

BELYAKOV, P.D., TRUSOV, M.M., NESTERENKO, A.G.

New instruments for pediatric surgery. Med.prom. 12 no.6:55-56
Je '58 (MIRA 11:7)

1. Nauchno-issledovatel'skiy institut eksperimental'noy
khirurgicheskoy apparatury i instrumentov.
(SURGICAL INSTRUMENTS AND APPARATUS)

KAMAROV, V. I., KARLSON, L. I., MULIK, R. S., SARKISYAN, E. B.,

Equipment at present used in pneumosurgery and experimental clinical data on
the utilization of equipment and instruments of NIEKAII 34

Noyye khiruricheskie apparaay i instrumenty i omyt ikh or rebeniye (New
SURGICAL Equipment and Instruments and Experience in Their Use) No. 1,
Moscow, 1957 A collection of Papers of the Scientific Research Inst.
for Experimental Surgical Equipment and Instruments.

NIEKAII

TRUSOV, M.M., NESTREHENKO, A.G., BELYAKOV, P.D.

~~_____~~ Needle with a clamp for intravenous injections. Med.prom. 12
no.6:58-59 Je '58 (MIRA 11:7)

1. Nauchno-issledovatel'skiy institut eksperimental'noy
khirurgicheskoy apparatury i instrumentov.
(HYPODERMIC NEEDLES)

TRUSOV, M.S., kand.med.nauk

Study of dark adaptation in glaucoma using a chamber with light
filters. Vest.oft. no.5:34-36 '62. (MIRA 15:12)

1. Kafedra glaznykh bolezney (zav. - prof. N.V.Ochanovskaya)
Kubanskogo meditsinskogo instituta.
(GLAUCOMA) (EYE--DISEASES AND DEFECTS)

EXCERPTA MEDICA Sec 2 Vol 11/7 Physiology July 53

3254. TABLES FOR VISUAL ACUITY TEST AND THEIR ILLUMINATION (Russian text) - Tlusov M. S. - ZH. OFTALM. 1956, 5 (230-233)
A critical evaluation of existing tables used for determination of visual acuity is given. The author considers that in order to standardize the methods of testing for visual acuity and for its more precise determination all medical establishments should use one table showing letters of the Russian alphabet. The author recommends Syltsev's improved table for this purpose. It is suggested that the following modifications be made to Syltsev's table: the letter 'K' be substituted by the letter 'II'; the number of signs per line be increased; the table be printed by 'Goznak' on sheet cardboard paper with a glazed surface (GOST274); the interline distance be increased to 2.5 cm. The tables should remain suitable for use for 2-3 yr. A lighting device is suggested, 60 cm. long, 40 cm. wide with four 40-watt electric lamps at the side, concealed from the subject by metallic reflector screens. Breakable glass of reflectors is replaced by tin plate, aluminium or zinc.

(S)

TRUSOV, M.S., podpolkovnik med. sluzhby

Changes in visual acuity and anomalous refraction in flying personnel.
Voen.-med. zhur. no.11:53-55 N '57. (MIRA 11:4)

(AVIATORS, diseases,

refractive errors & visual acuity changes (Rus)

(REFRACTIVE ERRORS,

in aviators (Rus)

(VISION,

acuity changes in aviators (Rus)

TRUSOV, M.S.

SOROKHTIN, G.N.; TRUSOV, M.S.; RAYEV, M.L.

Effect of Anticholinesterase on dark adaptation [with summary in English]. Biul.eksp.biol. i med. 44 no.12:81-85 D '57. (MIRA 11:4)

1. Iz kafedry fiziologii (zav. - prof. G.N.Sorokhtin) Khabarovskogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.

(PHYSOSTIGMINE, effects,
on dark adaptation (Rus))

(ADAPTATION, OCULAR,
dark, eff. of physostigmine (Rus))

(and)
TRUSOV, M. S.: Master Med Sci (diss) -- "The effect of vitamin A, eserine,
and Schizandra chinensis on the light sensitivity of the organ of vision".
Khabarovsk, 1958. 32 pp (Eye Clinic, Khabarovsk Med Inst), 200 copies (KL, No 6,
1959, 146)

USSR / Pharmacology, Toxicology. Analeptics.

V

Abs Jour: Ref Zhur-Biol., No 18, 1958, 85135.

Author : Trusov, M. S.

Inst : Not given.

Title : The Influence of Chinese Lemon on Dark Adaptation.

Orig Pub: In the collection, Materialy k izuch. zhen'shenya
i limonnika, No 3, Leningrad, 1958, 170-176.

Abstract: In 150 virtually healthy subjects aged 21-26 years, studies were made of the influence of freshly-prepared powder of dried Chinese lemon seeds (L) on light sensitivity of the eyes and on the process of dark adaptation. L, in a dose of 3 gm, was given orally in gelatin capsules. Light sensitivity was determined 10-15 min before taking the L and later, under the same conditions, every 1-1/2 hours. The duration of each study was 6-7 hours. L leads

Card 1/2

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USSR / Pharmacology, Toxicology. Analeptics.

Abs Jour: Ref Zhur-Biol., No 18, 1958, 85135.

Abstract: to a considerable increase in light sensitivity of the eyes and accelerates the process of dark adaptation in 90% of the subjects. The author considers L a valuable stimulant to the night vision under conditions of reduced illumination. -
- V. V. Berezhinskaya.

Card 2/2

17(16)

SOV/177-58-4-18/32

AUTHOR: Trusov, M.S., Lieutenant-Colonel of the Medical Corps

TITLE: On Certain Stimulators of Night Vision (O nekotorykh stimulyatorakh nochnogo zreniya)

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 4, pp 56-63 (USSR)

ABSTRACT: Based on his own investigations and those of other physicians, including G.Wald, G.N. Sorokhtin, and O.P. Minut-Sorokhtina, the author concluded that: 1) a daily 7,500 M.E. dose of concentrated Vitamin A preparations considerably increases night vision and accelerates dark adaptation. It shortens the time needed for recognizing an object in the Kravkov-Vishnevskiy apparatus by 1.5 to 2 times; 2) a subcutaneous injection of 0.5 to 0.8 ml of a 0.1% diluted eserine solution rapidly increases night vision and accelerates dark adaptation. The time of recognizing the object in the Kravkov-Vishnevskiy apparatus is shortened by 2.5 to

Card 1/2

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SOV/177-58-4-18/32

On Certain Stimulators of Night Vision

3 times; 3) a single administration of 3.0 g freshly-prepared powder of Chinese lemon-tree seeds increases night vision and accelerates dark adaptation. The time for recognizing the object in the Kravkov-Vishnevskiy apparatus is shortened by 2 to 2.5 times. The taking of night vision stimulators is to be recommended in the following cases: Vitamin A when a long-lasting (several days) increase in night vision and acceleration of dark adaptation is necessary; eserine, in case night vision is to be rapidly increased for a short time (6-8 Std); powder of the Chinese lemon tree if general stimulation of the organism and slower increase of night vision is necessary for 5-7 hours. There are 4 tables and 4 graphs.

Card 2/2

17(8)

SOV/177-58-11-24/50

AUTHOR: Trusov, M.S., Lieutenant-Colonel of the Medical Corps

TITLE: An Apparatus for the Examination of the Functions of the Eye Muscles

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 11, pp 72 - 75 (USSR)

ABSTRACT: The author designed a portable apparatus which permits him to examine the functions of the eyeball in a short time. The apparatus comprises 5 parts: an eyeglass frame with a support for the nose, a rod, a mobile sleeve, a plate with tests and a supporting handle (Figure 1). The deep and wide recesses for the glasses make it possible to use spherical, prismatic and cylindrical glasses of any refractive power. For systematic examinations of the functions of the eye muscles, the author recommends a certain sequence: The determination of 1) the guiding eye; 2) the binocular vision; 3) the nearest point of clear vision;

Card 1/2

SOV/177-58-11-24/50

An Apparatus for the Examination of the Functions of the Eye Muscles

4) the positive part of the relative accommodation;
5) the negative part of the relative accommodation;
6) the latent strabismus; 7) measuring of the angle
of manifest strabismus; 8) determination of the gam-
ma angle and 9) determination of the nearest point
of convergence. The apparatus can also be used for
optic treatment of strabismus as a separator of the
vision fields. Furthermore, it can serve as a
small diploscope. The new apparatus has been used
in the laboratory for aviation medicine and in the
eye department of the regional military hospital and
has proved its practical value for obtaining pre-
cise results of examination. There are 2 photographs.

Card 2/2

TRUSOV, M.S. vrach

Effect of vitamin A on the light sensitivity of the normal eye.
Oft. zhur. 13 no. 4: 236-241 '58 (MIRA 11:8)

1. Iz kliniki glaznykh bolezney (direktor - prof. I.G. Yershkovich)
Khabarovskogo meditsinskogo instituta.
(VITAMINS-A)
(EYE)

TRUSOV, M. S., kand. med. nauk

Case of congenital achromasia. Oft. zhur. 17 no. 4:250-252 '62.
(MIRA 15:7)

1. Iz glaznoy kliniki (zav. - prof. I. G. Yershkovich) Khabarovskogo meditsinskogo instituta.

(COLOR BLINDNESS)

TRUSOV, M.S., vrach (Khabarovsk)

Degenerative nodular dimness of the cornea (Groenow' disease).
Oft. zhur. 16 no.1:59-60 '61.
(CORNEA—DISEASES) (MIRA 14:3)

TRUSOV, M.S., podpolkovnik meditsinskoy sluzhby; CHUKHAREV, P.A.

Apparatus for the study of color vision. Voen.-med. zhur. no.3:
85-86 Mr '60. (MIRA 14:1)
(COLOR VISION)

TRUSOV, N. S.

Alfalfa

Mechanical treatment of alfalfa seed. Dokl. Akad. sel'khoz. 18, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

USSR / Cultivated Plants. Grains.

M-2

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24994

Author : Trusov, M. S., Belkin, N. I., Demina, M. N.

Inst : Yaroslav Agricultural Inst.

Title : A Study of the Agrotechnical Methods for Corn in
Yaroslavskaya Oblast'

Orig Pub: Tr. Yaroslavsk. s.-kh. in-ta, 1956, 3, 25-32

Abstract: At the experimental training farm of Yaroslav Agricultural Institute a study was made in 1954-1955 of the sowing periods, bed areas in square-pocket planting and the application of manure and organic mineral mixtures for corn. The highest cob yields were obtained with square-pocket planting (60 x 60 cm.) in 25-30 May with 2 plants per bunch, the seeds bedded 5 cm. deep, with the simultaneous application of manure under the plow and

Card 1/2

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USSR / Cultivated Plants. Grains.

M-2

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24994

Abstract: an organic mineral mixture being placed in the
holes when sowing. -- Ye. T. Zhukovskaya

Card 2/2

USSR / Cultivated Plants. Grains. Legumes. Tropical M-1
Cereals.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6231

Author : Trusov, M. S.
Inst : Yaroslavl' Agricultural Institute
Title : Study of Methods Designed to Increase the Yield
of Corn

Orig Pub : Tr. Yaroslavsk. s.-kh. in-ta, 1957, 4, 3-19

Abstract : The best sowing time in experiments carried out at the Yaroslavl' Agricultural Institute on medium argillaceous soil in 1956 was 25 - 30 May. The seeds were put in at a depth of 5 cm. The soil temperature at this depth was higher by 1.3 - 1.8° than at a depth of 8 cm. The sprouts came out a day earlier; the number of empty hills diminished from 6 to 5.6 when sowing

Card 1/3

17

. USSR / Cultivated Plants. Grains. Legumes. Tropical M-1
. Cereals.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6231

took place on 25 May and from 3.5 to 1.3% - when it was done on 30 May. The green fodder yield increased by 20 - 8 cwt. The highest yields of Voronezh 76 cobs were obtained with 3 plants in a 60 x 60 hill. The yield was somewhat lower in a 70 x 70 cm hill. The Krasnodarsk 1/49 variety produced 623 cwt/ha of green stuff with 3 plants per 45 x 45 hill. The yield was 500, 2 cwt in a 60 x 60 hill. With 5 plants in a hill of 70 x 70, the yield was 447.1 cwt/ha. The yield of green mass in sowings of corn with peas was higher by 62.5% than in pure sowings. The increase in the percentage of digestible protein was 89.9%. The highest yield was obtained in squares of 45 x 45 with 3 plants

Card 2/3

USSR / Cultivated Plants. Grains. Legumes. Tropical M-1
Cereals.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6231

of corn and 4 of peas (401.1 cwt/ha) as well
as with 3 plants of corn and 2 of peas (386.9).
Bibl. 18 titles. -- M. V. Dranishnikov

Card 3/3

18

TRUSOV, N. V.

"Evaluation of the Food Value of Rations Containing Fish
Waste and Seaweed in the Raising and Fattening of Swine."
Cand Agr Sci, Leningrad Agricultural Inst, Min Higher Education, Leningrad,
1954. (KL, No 11, Mar 55)

SO: Sum No. 670, 29 Sep 55 - Survey of Scientific and Technical Dis-
sertations Defended at USSR Higher Educational Institutions (15)

BROYT, S.M.; TRUSOV, N.Ya.

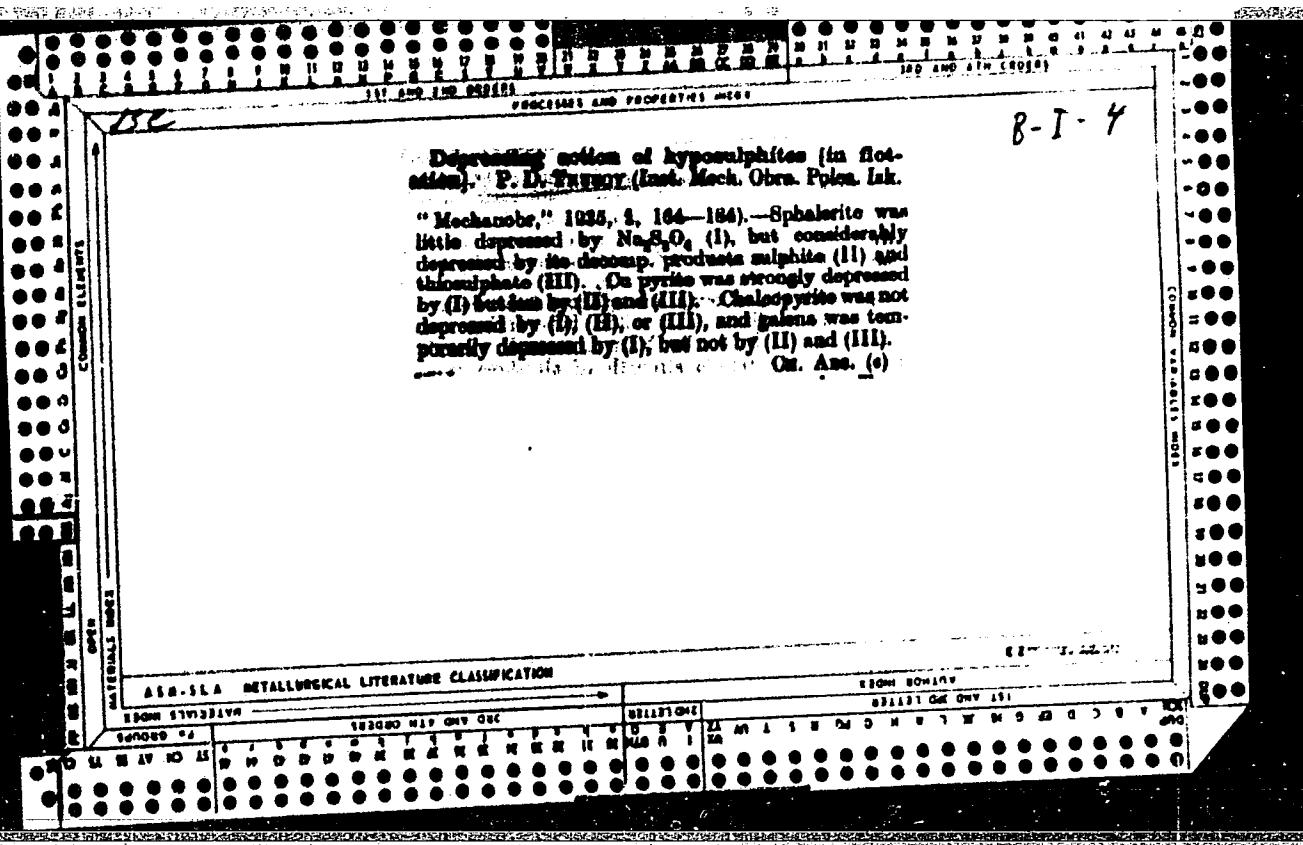
Fritting of a hearth bottom with fine-grained magnesite.
Metallurg 8 no.1:17-19 Ja '63. (MIRA 16:1)

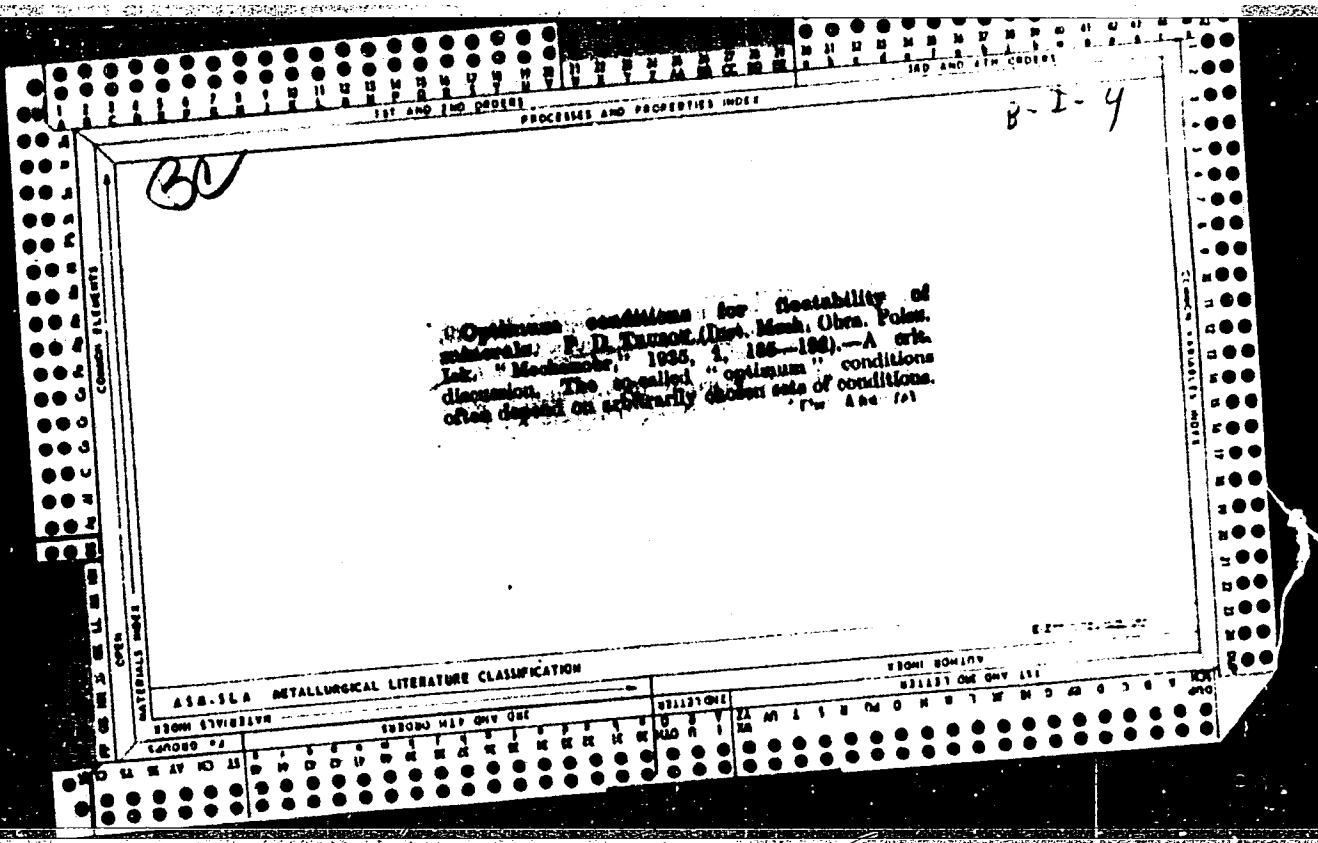
1. Kuzbasskiy metallurgicheskiy zavod.
(Open-hearth furnaces—Maintenance and repair)

BROYT, S.M.; TRUSOV, N.Ya.

Use of highly refractory concrete in open-hearth furnaces. Metallurg
10 no. 4:11-13 Ap '65. (MIRA 13:7)

1. Kushvinskiy metallurgicheskiy zavod.



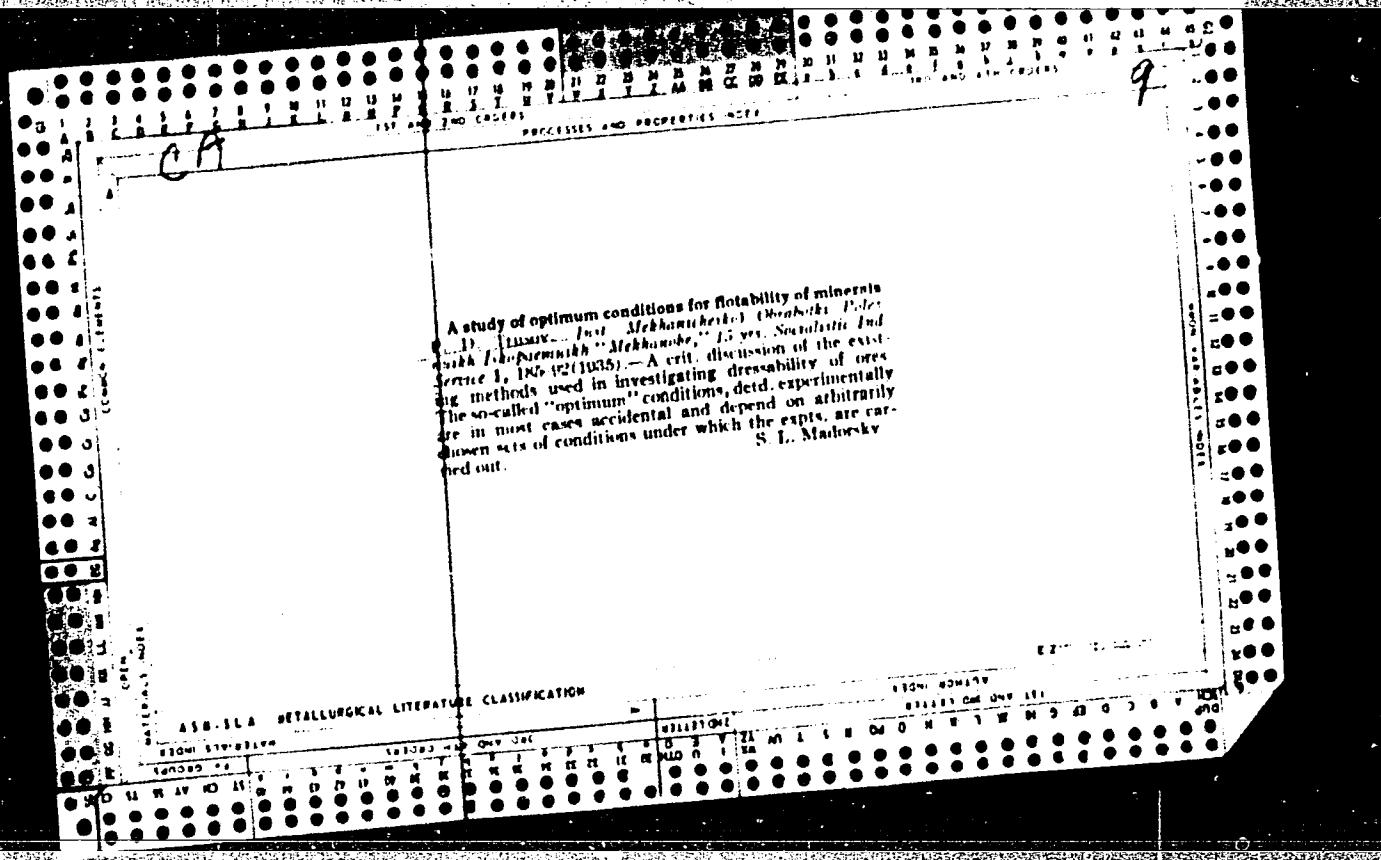


CP
Depressing action of hyposulfites (in the process of flotation). P. D. Trusov *Ind. Mekhanicheskoi Obra-
borki Polenovikh Izbiperuvitikh "Mekhanoberi"*, 15, No.
Sosul'skii. *Ind. Sverc'e*, 1, 164-84(1935). An exptl
study of the effect of Na_2SO_3 as a depressing agent for
sulfide minerals in the flotation process. Sphalerite was
found to be little depressed by Na_2SO_3 but considerably
depressed by its decompr. products sulfite and thiosulfate.
Cu pyrite is depressed strongly by the salt but less by sul-
fite and thiosulfate. Chalcopyrite is not depressed by
the salt or its decompr. products and galena is partly and
temporarily depressed by the salt, but not by sulfite or
thiosulfate. S. L. Madorsky.

CPL

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

ECON. BOMBS



TRUSOV, P.K.
TRUSOV, P.K.

Build more rapidly and better. Sel'stroi. 12 no.9:14-15 S '57.
(MIRA 10:10)

1. Nachal'nik otdela kapital'nogo stroitel'stva upravleniya
sel'skogo khozyaystva Kaluzhskoy oblasti.
(Kaluga Province--Construction industry)

TRUSOV, S.

Innovations in a village. Izobr. i rata. no.11:38-39 '63.
(MIRA 16:12)

1. Zaveduyushchiy otdelom sel'skogo khozyaystva TSentral'-
nogo Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov.

TRUSOV, S.I., inzh.; DVORNIKOV, A.F., inzh.

Conversion of the operation of the condenser of the PT-25-90/10
turbine from two to four cycle water flows. Elek. sta. 35 no.8:69
(MIRA 17:12)
Ag '64.

TRUSOV, S.M., kand.tekhn.nauk; SHERSTYUK, A.N., kand.tekhn.nauk

Calculation of the field of velocities in a hydraulic torque converter. Izv. vys. ucheb. zav.; energ. 4 no.7:107-114
J1 '61. (MIRA 14:7)

1. TSentral'nyy nauchno-issledovatel'skiy avtomobil'nyy i
avtomotornyy institut (for Trusov). 2. Moskovskiy ordena
Lenina energeticheskiy institut (for Sherstyuk).
(Hydraulic machinery)

TRUSOV, S.M., kand.tekhn.nauk

Designing combined hydraulic torque converters. Avt.prom. no.11:30-
35 N '60.
(MIRA 13:11)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni
nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Motorbuses--Transmission devices)

TRUSOV S /

Q

USSR/Farm Animals. Cattle.

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78710.

Author : Trusov, S. I.
Inst : Institute of Animal Morphology AS USSR-Voronezh Zoo-teh-Vet Inst.
Title : On the Metabolism Between the Mother and Fetus of
Cattle.

Orig Pub: Tr. In-ta morfol. zhivotnykh. AN SSSR, 1957, vyp. 22,
93-97.

Abstract: Investigations are cited of 261 cows and the same number of fetuses. Blood from the mothers was taken from the jugular vein before each milking; blood from the fetus from the umbilical artery. It was established that the pH of the blood of the cows equals 7.66, of the blood of the fetus 7.31; respective protease activity 0.86

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USSR/Farm Animals. Cattle.

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78710.

Q

and 0.12; arylase activity 429 and 115; lipase activity 5.63 and 1.44. Catalase number 2.96 and 1.77, sugar 73 and 105 mg%, lactic acid 13.35 and 101.53 mg%, amino nitrogen 3.27 and 9.96 mg%, proteins 7.08 and 3.21%, acetone bodies 14.88 and 20.99%.

card : 2/2

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2

ZAGAYEVSKIY, I.S., prof.; MERKUSHEV, A.V., prof.; IL'IN, M.M., assistant
TRUSOV, S.I., prof.; KOROPOV, V.M., prof.
Reviews and bibliography. Veterinariia 39 no.5:85-88 My '62
(MIRA 18:1)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2"

TRUSOV, S.I.

KRASOVITSKIY, A.I., inzhener; TRUSOV, S.I., inzhener.

Changing the system of pulverized fuel preparation using an
intermediate bunker. Elek.sta. 28 no.9:82-83 S '57. (MIRA 10:11)
(Coal, Pulverized)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2

TRUSOV, S.I., inzh.; DVORNIKOV, A.F., inzh.

Operation of a magnesite unloading and traasporting system.
Elek. sta. 34 no.10:79-80 O '63. (MIRA 16:12)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2"

TRUSOV, S.M., kand. tekhn. nauk

Set of hydraulic torque converters with improved characteristics
for motortrucks and urban motorbuses. Avt. prom. 31 no.8:17-19
(MIRA 18:8)
Ag '65.

1. Tsentral'nyy nauchno-issledovatel'skiy ordena Trudovogo Krasnogo
Znameni avtomobil'nyy i avtomotornyy institut.

12(2)

SOV/113-59-6-6/21

AUTHOR: Trusov, S.M., Candidate of Technical Sciences

TITLE: Selecting the Parameters of a hydraulic Torque
Converter With Rated Operating Conditions

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 6, pp 17-
22 (USSR)

ABSTRACT: The article describes work carried out in NAMI on
systematization of the properties of single-stage
hydraulic torque converters to establish a mutual
connection between the basic design and rated para-
meters as well as the conversion and load charac-
teristics of the hydraulic torque converters. The
results of these investigations enabled the follow-
ing conclusions to be drawn. (1) The recommenda-
tions and functions shown in Table 2 and Figures 7
and 8 can be used to select the initial design and
rated parameters of single-stage hydraulic torque c
converters for producing a model with previously

Card 1/ 2

SOV/113-59-6-6/21

Selecting the Parameters of a hydraulic Torque Converter With
Rated Operating Conditions

given characteristics from a number of possible ones. (2) A series of laws have been established on the character of the flow of the discharge characteristics of impellers. With these data it is possible to choose the rational circulation cycle of a two-stage hydraulic torque converter working also as a hydraulic clutch with better conversion properties. There are 3 diagrams, 8 graphs, 2 tables and 5 Soviet references.

ASSOCIATION: NAME

Card 2/2

TRUSOV, S.M., Cand Tech Sci—(diss) "Study of automobile single-stage hydro-transformers and the bases of their ~~construction~~ ^{design}." Nov, 1957. 15 pp with drawings (Min of Higher Education USSR. Inst Automobil'nich Inst), 120 copies (kl, 26-78, 112)

- 10 -

TRUSOV, S.M.

Characteristic operation of complex hydraulic transmission systems.
Avt. i trakt.prom. no.814-16 Ag '56. (MIRA 9:10)

1. Nauchno-issledovatel'skiy avtomobil'nyy institut.
(Automobiles--Transmission devices)

TRUSOV, S.M.

TRUSOV, S.M.

Effect of the shape of rotor wheel runners on the characteristics
of single-stage converters. Avt.i trakt.prom. no.7:6-11 J1 '57.
(MIRA 10:11)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni
nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Hydraulic transmission)

KOROTONOSHKO, N.I., kandidat tekhnicheskikh nauk; MAZALOV, N.D., kandidat
tekhnicheskikh nauk; TEUSOV, S.M.

Stand testing of one-stage four-wheel hydraulic transmission systems.
Avt.i trakt.prom.no.12:14-17 D '56. (MLRA 10:2)

1. Nauchno-issledovatel'skiy avtomobil'nyy institut.
(Automobiles--Transmission devices)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2

TRUSOV, S.M.

Automatic transmissions abroad. Avt. i trakt. prom. no. 6:34-41
Je '56. (MLRA 9:9)

(United States--Automobiles--Transmission devices, Automatic)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2"

TRUSOV, S. N.

Reclamation of Land

Work o f Meadow Improvement Stations. Korm. baza 3 no. 4, 1952

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

TRUSOV, V., inzhener

Unsolved problems in designing garages. Avt. transp. 33
no.5:20-21 My '55. (MIRA 8:8)
(Garages)

TRUSOV, V.P.; TELESNITSKIY, B.A.

Mechanizing the feeding of raw materials into beaters. Leg. prov.
18 no.8:41 Ag '58. (MIRA 11:9)
(Leather substitutes)

TRUSOV, V.A.; TRUSOVA, L.P.

Sectional sector saws equipped with plates of hard alloys.
Der. prom. 12 no.7:25-26 Jl '63. (MIRA 16:8)

1. Moskovskiy mebel'no-sborochnyy kombinat No.1.
(Circular saws)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2

MESHCHERIN, V.T.; TRUSOV, V.A.

Investigating the mechanics of the process of cutting a round
red. Kuz.-shtam.preizv. 5 no.5:8-11 My '63. (MIRA 16:9)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2"

VINOGRADSKIY, V.F.; DAVIDENKO, V.K.; TRUSOV, V.A.

New styles of furniture hardware. Der.prom. 9 no.5:
18-19 My '60. (MIRA 13:?)

1. Moskovskiy mebel'no-sborochnyy kombinat No.1.
(Furniture industry)
(Hardware)

BYKOV, A.S.; AFANAS'YEVA, K.D.; TRUSOV, V.A.; LABKOVSKIY, S.S.

New types of manufacture by the Mytishchi Synthetic Building
Materials and Products Combine. Stroi.mat. 8 no.7:7-9 Jl '62.

(MIRA 15:8)

(Mytishchi--Building materials industry)
(Mytishchi--Plastics industry)

L 03025-67 EWT(l) IJP(c)
ACC NR: AP6025965

SOURCE CODE: UR/0051/66/021/001/0114/0116

AUTHOR: Anderson, E. M.; Anderson, E. K.; Trusov, V. F.46
L

ORG: none

TITLE: Modification of power calculations for base metal atomic oscillators so as to account for spin-orbital interactions

SOURCE: Optika i spektroskopiya, v. 21, no. 1, 1966, 114-116

TOPIC TAGS: quantum oscillator, wave equation, spin orbit coupling, line splitting, multiplet splitting, Schroedinger equation

ABSTRACT: On the basis of a modified form of the Schroedinger wave equation, the authors calculated the energies of optical transitions for several base metals. The tables are useful for making accurate calculations of the power output from quantum oscillators. Generally, these power calculations reduce to the solution of a matrix with elements of the type $\int f_i r f_k dr$, where f_i ; f_k are the radial wave functions for an optical electron transition in a base metal atom. These functions are solutions to the Schroedinger equation

$$f_{nl}(r) = \left[2\epsilon - \frac{2Z(r)}{r} + \frac{l(l+1)}{r^2} \right] f_{nl}(r)$$

UDC: 539.184.001.1

Card 1/2

L 03025-67

ACC NR: AP6025965

which does not account for the spin-orbital interactions. These effects, however, can be accounted for in the framework of the nonrelativistic theory by the inclusion of the corresponding operator in the wave equation

$$f''_{nl}(r) = \left[2\epsilon - \frac{2Z(r)}{r} + \frac{l(l+1)}{r^2} + \frac{\gamma}{c^2} \left(\frac{Z}{r^3} + \frac{1}{r} \frac{dV}{dr} \right) \right] f_{nl}(r),$$

where $V(r)$ is the deflecting potential, $\gamma = \begin{cases} \frac{1}{2}l & \text{where } l = l + \frac{1}{2} \\ -\frac{1}{2}(l+1) & \text{where } l = l - \frac{1}{2} \end{cases}$.

The deflecting potential can be expressed as

$$V(r) = \frac{Z-1}{r} \left[1 - \frac{\exp(-ar)}{1+Ar} \right],$$

The authors used these expressions to compile tables for the values of f for sodium, potassium, and cesium. Orig. art. has: 4 tables, 3 formulas.

SUB CODE: 20/ SUBM DATE: 21Dec65/ ORIG REF: 005/ OTH REF: 004

ms
Card 2/2

"Direct Injection of Fuel Into a Supplementary Chamber of an Engine With Low Compression and Electric Ignition." Thesis for degree of Cand. Technical Sci. Sub 27 Jun 49; Moscow Order of the Labor Red Banner Higher Technical School Inst. N. E. Bauman.

Summary #2, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernaya Moskva, Jan-Dec 1949.

TRUSOV, V. I.

"New Data Concerning the Role of Amino-Acids in the Nutrition" (p. 495)
by Trusov, V. I.

SO: Advances in Modern Biology, (Uspekhi Sovremennoi Biologii), Vol. X, No. 3, 1939

✓

11E

New data on the role of amino acids in nutrition. V.
I. Trusov. *Uspeshki Sovremennoi Biol.* 10, No. 3, 405-
526 (1939); "Khim. Referat. Zhur." 1939, No. 12, 32.
Methods for the investigation of the ability of the animal
organism to synthesize amino acids are described briefly.
The results of the investigations in the last 30 years and
expts. of the last decade on the role of amino acids con-
tained in proteins are given. W. R. Henn

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2

TRUSOV, V. I.

"The Role of Amino Acids in the Animal Body" (p. 155) by Trusov, V. I. (Moscow)

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XIX, No. 2, 1945.

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2"

CA

11/15

Determination of choline in biological materials. V. I. Ershov (Tech. Inst., Fish Ind., Moscow). *Biochemistry* 15, 495-8(1950).—The choline was transformed into the Reinecke salt (Marenzi and Cardini, *C.A.* 37, 3118^a). The Cr was oxidized by $KBrO_3$ or H_2O_2 , and the resulting chromate was titrated with $Na_2S_2O_3$ (Mahr, *C.A.* 30, 3740^b). The choline content of the yellow of chicken egg was 1.1%, Siberian salmon eggs (red caviar) 0.6%, sturgeon eggs (black caviar) 0.3%, and Iceland herring (meat) 0.2%.
H. Priestley

Dept. Organic Biol Chem.

1951

Comparison of intensity of metabolism in hens of different varieties and different types of exterior. V. I. Trusov (Sci. Research Inst.) Aviculture Ind., Moscow). *Fiziol. Zhur. S.S.R.*, 42, 407-422 (1966); cf. Khilar, *C.A.* 66, 4036; 42, 6553.—The formula used by Kleiber for calculating the level of metabolism in respect to body dimensions of various animals gives results which are too low when it is applied to roosters. The roosters of egg-laying varieties of the bird show a higher metabolic level than do those of meat-forming birds. G. M. Kosolapoff

+jatko se promyslennosti

TRUSOV, V.I.

Distribution of phosphatides in the organs of salmon. Bickiniiia
25 no.1:24-27 Ja-F '60.
(MIRA 13:6)

1. Chair of Organic and Biological Chemistry, Technical Institute
of Fish Industry and Economy, Moscow.
(PHOSPHOLIPIDS metab.)
(FISH)

TRILSOV, V.Ia. (Moskva).

Phosphatides. Trudy Inst. okean. 23:28-45 '57.
(Phosphatides)

(MIRA 11:3)

ACC NR: AP7002643 (A,N) SOURCE CODE: UR/0413/66/000/023/0188/0188

INVENTOR: Trusov, V. M.; Fedorova, A. P.

ORG: None

TITLE: A digital device for recording information from frequency meters. Class 42,
No. 151888

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966,
187-188

TOPIC TAGS: digital system, frequency meter

ABSTRACT: This Author's Certificate introduces a digital device for recording information from frequency meters. The unit contains a standard frequency pulse generator, a counter-divider, an output counter and a system of valves. The unit is designed for using a loop or electronic oscilloscope as the code registration instrument. The output of the frequency meter is connected to the input of a counter-distributor which controls a commutator used for sequential connection of the loop (loop) of the electronic scope to all outlets of the output counter.

SULIMA, A.M.; YEVSTIGNEYEV, M.I.; TRUSOV, V.M.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756820019-2"

The VIII-1 NAI VIAM high-priority certificate
for endurance and vibration tests of parts and units of jet engines
and aircraft materials. Nauch. dokl. vys. shkoly; mash. i prib.
no.2:110-119 '59. (MIRA 12:12)

(Testing machines)
(Airplanes--Turbojet engines--Testing)

SYUNDYUKOV, Kh.Kh., kand.tekhn.nauk; TRUSOV, V.P., kand.tekhn.nauk

Construction and maintenance train of logging railroads. Put'
1 put.khoz. no.12:27 D '59. ("ИДА 12-41")

KOMAROVSKAYA, Anna Stepanovna, kand. tekhn. nauk; TRUSOV, Vasiliy Pavlovich; VAL'KOV, Aleksandr Stepanovich, inzh.; URTAYEV, G.T., red.; MEL'NIKOVA, A.G., red. ied-va; PARAKHINA, N.L., tekhn. red.

[Maintenance and repair of narrow-gauge logging railroads] So-
derzhanie lesovoznykh uzkokoleinykh zheleznykh dorog. Moskva,
Goslesbumizdat, 1961. 121 p. (MIRA 14:9)
(Railroads, Narrow-gauge) (Lumber--Transportation)

SYUNDYUKOB, Kh.Kh., TRUSOV, V.P.; NOVOSEL'TSEV, N.V., red.; PITERMAN,
Ye. L., red. izd-va.; BACHURINA, A.M., tekhn. red.

[Construction and repair train for narrow-gauge railroads; "Lumber
industry and forestry" pavilion] Stroitel'no-remontnyi poezd dlia
uzkokoleinykh zheleznykh dorog; pavil'on "Lesnaiia promyshlennost'
i lesnoe khoziaistvo. [Moskva] M-vo lesnoi promyshl. SSSR [1957] 14p.
(MIRA 11:11)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka.
(Railroads--Trains)

ACC NR: AT6022239

SOURCE CODE: UR/0000/66/000/000/0048/0052

AUTHOR: Trusov, V. S.

ORG: none

TITLE: The optimum shape of noncoherent radar pulse signals

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966.
Sektsiya radiotekhniki. Doklady. Moscow, 1966, 48-52

TOPIC TAGS: radar pulse, radar signal analysis, signal shape, signal noise separation

ABSTRACT: The author presents a method for deriving the optimum shape of radar pulses which minimizes the deviations in the estimate of target distance and velocity. It is assumed that the S/N is sufficiently high and that the radar system operates in a narrow band of frequencies processing the information by the maximum likelihood method. Function of error calculated on a digital computer supply information on the optimum pulse shape for fixed target distance, target velocity and target acceleration. The problem was solved for two battle cases. But the shape of the optimum pulse depends on the type of target and the quality of the received signal. The optimum pulse shape is determined by the ratio of the signal power to the noise power.

AMM 5000 / 27 JUNE 1967 - 1000000 - 00000000 - 0000

Card 1/1

34

BTR

4986° New Data on the Role of Gelatin in Photographic Emulsions. (In Russian.) V. V. Trusov and K. M. Sakladze. Doklady Akademii Nauk SSSR, new ser., v. 81, Dev. 11, 1951, p. 867-870.
Experiments were made on the above under various conditions. Data are discussed and charted.

PA

*Directive Material's, Suspects
and other figures.*

1050

Polarographic Evaluation of the Photographic Activity of Gelatin. V. V. Trusov.
Zavodskaya Lab., 13, 303-308, 1947.—In the presence of gelatin in 0.1% solution, a polarographic maximum of oxygen reduction at the Hg cathode in air-saturated 0.007 M NaHSO₄ was depressed, by 41-43% with three of the five gelatins investigated, by 48-50% with the other two. Photographic emulsions were prepared under rigorously identical conditions with the five gelatins, and sensitivity, fog density and contrast were determined as a function of time of second development at 45°, pH 6. Emulsions prepared with the three gelatins of the first group exhibited maximum sensitivity by about two times those with the standard gelatin. In the case of the last two gelatins, the density developed is 1.3-1.4 times higher than with the first group. The two standard gelatins are characterized by a low density developed and a low contrast. The following table gives the results of the experiments on the photographic activity of the gelatins investigated.

771.513

1945

137

Polarographic Method of Estimating the Photographic Activity of Gelatin.
V. V. Iakusov. *Zavodskaya Laboratoriya* (U.S.S.R.), 1947, 13, 303-308. -
The gelatins were found to differ in their capacity to suppress the maxima in the
polarographic wave. This capacity is related to the surface-active characteristics
of the gelatin. The method is used to determine the photographic activity of
Mon. Abt. Bull. Kodak Res. Labs.

771.513

(PH - 11e)

TEPLYAKOV, P.A.; TROTSOV, V.V.

Phosphorescence spectra of acenaphthene, diphenyl, and carbazole.
Izv. vys. ucheb. zav.; fiz. 8 no.3:69-75 '65. (MIRA 18:9)

I. Odnochkoye vyschinoye inzhenernoye morakoye uchilishche.

MIKHAYLENKO, V.I. [Mykhailenko, V.I.]; TEPYAKOV, P.A. [Tepliakov, P.A.];
TRUSCV, V.V.

Luminescence spectra of tolan and stilbene at 77°K. Ukr. fiz. zhur.
10 no.9:1019-1024 S '65. (MFA 18:2)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche.

TEPLYAKOV, P.A. [Teplinkov, P.O.]; TRIGOV, V.V.

Phosphorescence spectra of aromatic hydrocarbons in the crystalline state and in dicarboxylic acid. Ukr. fiz. zhur. 10 no.6:645-652 Je '65.
(MIRA 18:7)

1. Odesskoye vyssheye inzhenerno-morskoye uchilishche.

BELOSLUDTSEV, I.A.; TRUSOV, V.V.

Characteristics of the changes in the absorptive and excretory function of the liver determined by the I^{131} -labelled Rose Bengal test in thyrotoxicoses during radioiodine therapy.
Probl. endok. i gorm. 11 no.6:36-39 N-D '65. (MIRA 18:12)

1. Kafedra gospital'noy terapii Izhevskogo meditsinskogo instituta (rukoviditel' raboty - dotsent L.A. Leshchinskiy).

L 15567-66
ACC NR: AP6004405

by the selection rules imposed by molecular symmetry (although exclusion with respect to spin remains in force). The difference in structure for the fluorescence and phosphorescence spectra of naphthalene solutions indicates that there is a difference in the types of symmetry for the first excitation singlet and triplet levels. On the other hand the structure of the fluorescence and phosphorescence spectra for solutions of tolan and nonane at 77°K are completely identical. The experimental data show that the symmetry of the triplet and first excited singlet level for tolan molecules is B_{3u} . B_{1u} symmetry is characteristic of the phosphorescence level for the naphthalene molecule. Orig. art. has: 3 tables, 1 formula.

SUB CODE: 20/ SUBM DATE: 03Nov64/ ORIG REF: 012/ OTH REF: 015

Card 2/2 m/c

PEVCHIKH, V.V.; TRUSOV, V.V.

Clinical evaluation of the acidogenetic function of the stomach
based on the hourly output of free hydrochloric acid in the
study of some therapeutic influences. Sov.med. 28 no.12:106-
110 D '65. (MIRA 18:12)

1. Kafedra gospital'noy terapii (rukovoditel' raboty - dotsent
L.A.Leshchinskiy) Izhevskogo meditsinskogo instituta.

TRUBOV, V.V.; OLEYNIK, N.A.

Characteristics of the functional state of the adrenal cortex
in patients with peptic ulcers and its changes under the
influence of the ganglionic blocking preparations hexenium and
gangleron. Trudy izhev.gos.med.instit. 21:116-119 '66.
(MIA 1981)

1. Kafedra gospital'noy terapii (zav. - dozent I.N.Makarova,
nauchnyy rukovoditel' - dozent I....(ogni-askiy) Izhevskogo
meditsinskogo instituta.

L 1920-66 EWT(1)/EWT(m)/EPF(c)/EWP(j) IJP(c) RM

ACCESSION NR: AP5024131

UR/0185/65/010/009/1019/1024

AUTHOR: Mykhaylenko, V. I. (Mikhaylenko, V. I.); Teplyakov, P. O. (Teplyakov, P. A.); Trusov, V. V.

YY,55

YY,55

YY,55

TITLE: Luminescence spectra of toluene and stilbene solutions at 77K

21/44,55

33
30

SOURCE: Ukrayins'kyy fizichnyy zhurnal, v. 10, no. 9, 1965, 1019-1024

B

TOPIC TAGS: toluene, luminescence spectrum, combination scattering

ABSTRACT: The present authors investigate the luminescence spectra of toluene and stilbene at 77K in various normal paraffins, in alcohol, and in azelaic acid. Results are presented in the form of comprehensive spectral tables. The luminescence spectra of toluene (D_{2h}) shows a most pronounced structure in nonane; the interpretation was carried out by means of the 250, 380, 535, 700, 995, 1140, 1242, 1390, 1490, 1595, 2225 cm^{-1} in excellent agreement with the frequencies of combination scattering of toluene. The triplet and singlet levels of toluene molecules belong to the B_{3u} type of symmetry. The stilbene fluorescence contained the 210, 630, 841, 998, 1195, 1320, 1430, 1597, 1637 cm^{-1} frequencies. Singlet stilbene molecules (C_{2h}) have an A_u or B_u symmetry. Results thus show that toluene and stilbene molecules are deformed in normal paraffins and that the structure of

Card 1/2

L 1920-66

ACCESSION NR: AP5024131

their luminescent spectra are essentially different. Orig. art. has: 2 formulas
and 3 tables.

ASSOCIATION: Odes'ke vyshche inzhenerne mors'ke uchlyshche (Odessa Higher
Maritime Engineering School) 44,55

SUBMITTED: 25Sep64

ENCL: 00

SUB CODE: OC, GC, OP

NO REF SOV: 012

OTHER: 001

Card 2/2

L01252-66

ACCESSION NR: AP5020814

UR/0048/65/029/008/1419/1421 36
33AUTHOR: Teplyakov, P. A., Trusov, V. V., Mikhaylenko, V. I., Martynchenko, V. M.TITLE: Influence of the solvent on the luminescence spectra of diphenylene oxide and diphenylacetylene Report, 13th Conference on Luminescence held in Khar'kov
25 June to 1 July 1964SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 8, 1965, 1419-1421,
and insert facing p. 1409TOPIC TAGS: luminescence spectrum, fluorescence spectrum, line spectrum, solution
property, organic compound, vibration frequencyABSTRACT: In order to investigate the influence of the solvent on quasi-line
(phonon free) luminescence spectra, the authors have examined the fluorescence and
phosphorescence spectra of diphenylene oxide and diphenylacetylene in n-hexane,
n-heptane, n-octane, n-nonane, ethyl alcohol, ether, glutaric acid, and azelaic
acid at 77°K. The phosphorescence spectra were recorded with an apparatus that
has been described elsewhere (V.V.Trusov and P.A.Teplyakov, Optika i spektroskop-
iya, 16, 52, 1964). The fluorescence spectra were excited by a group of mercury
lines isolated with a quartz monochromator. The phosphorescence spectra of both

Card 1/2

L01252-66

ACCESSION NR: AP5020814

3

luminophors showed quasi-lines in all the solvents except glutaric acid; in this solvent the diphenylene oxide spectrum had 15 lines and the diphenylacetylene spectrum had none. The most structured diphenylene oxide spectrum was that in heptane (89 lines between 405 and 460 millimicron) and the most structured diphenylacetylene spectrum was that in nonane (36 lines). The fluorescence spectra also consist of quasi-lines, but they were less sharp than in the phosphorescence spectra. The diphenyl oxide spectrum was analyzed in terms of 16 vibrational frequencies that have been found in the combination scattering spectrum by P. Dementot and M. Chaix (Compt. rend., 202, 851, 1936). The diphenylacetylene spectrum was analyzed in terms of 11 vibrational frequencies that are in good agreement with the frequencies found in the Raman and infrared spectra by T.N. Khalimonova (Optika i spektroskopiya, 14, 639, 1963). Orig. art. has 1 figure and 1 table.

ASSOCIATION: Odesskoye vyssheye inzhenernoye morskoye ychilishche (Odessa Naval Engineering College) *35.41*

SUBMITTED: 00

ENCL: 00

SUB CODE: OP, GC

NO REF SOV: 005

OTHER: 003

Card *24* 2/2

L 01270-66 EWT(l)/EPA(s)-2/EWT(m)/EPF(c)/EPF(j) IJP(c) RM

ACCESSION NR: AP5020815

5544

5544 UR/0048/65/029/008/1422/1424

47

41

AUTHOR: Mikhaylenko, V. I.; Teplyakov, P. A.; Trusov, V. V.; Teplyakov, V. A.

5544

TITLE: Vibrational structure of the spectra of organic molecules with D_{2h} symmetry
Report, 13th Conference on Luminescence held in Kyar'kov 25 June to 1 July 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 8, 1965, 1422-1424

TOPIC TAGS: luminescence spectrum, phosphorescence spectrum, line spectrum, solution property, vibration spectrum, molecular vibration, molecular symmetry, selection rule, organic compound

ABSTRACT: The authors discuss data in the literature on the quasi-line luminescence spectra of diphenyl, diphenylacetylene, and stilbene in normal paraffin solvents in order to determine the extent to which the vibrational selection rules due to the molecular symmetry are violated. Diphenyl has D_{2h} symmetry. From a discussion of the quasi-line phosphorescence spectrum it is concluded that only the single electron transition $B_{2u} - A_{1g}$ is active in the phosphorescence spectrum and that the selection rules are rigorously satisfied. Diphenylacetylene also has D_{2h} symmetry. Best agreement with the experimental data was obtained with the assumption that the symmetry of the triplet level is B_{3u} . If this assumption is correct there is only

Card 1/2

L 01270-66

ACCESSION NR: AP5020815

one weak forbidden b_{3g} vibration evinced in the phosphorescence spectrum. This violation of the selection rule is ascribed to distortion of the molecule when the solution is frozen. Stilbene does not have D_{2h} symmetry, but its spectrum is nevertheless analyzed in terms of the D_{2h} group. This procedure is justified by the close similarity between the stilbene and diphenylacetylene molecules. If the first excited singlet level of stilbene has $^1B_{3u}$ symmetry, there is only a single forbidden b_{3g} vibration evinced in the luminescence spectrum. The violation of the selection rule is again ascribed to deformation of the molecule, and it is conjectured that this deformation consists of a change in the angle between the double and single bonds with the result that the molecule assumes C_{2h} symmetry. The authors close with a brief quotation from E.V.Shpol'skiy, to the effect that group theory is useful, among other things, for detecting and analyzing minute molecular deformations. Orig. art. has: 1 table.

ASSOCIATION: Odesskoye vyssheye inzhenernoye morskoye uchilishche (Odessa Naval Engineering College)

SUBMITTED: 00 65,44

ENCL: 00

SUB CODE: OP, GC

NO REF Sov: 010

OTHER: 004

Card 272

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2

TEPLYAKOV, P.A.; TURCOV, V.V.

Photoluminescence spectra of frozen chlorine solutions. Sov. spis.
nauk. 1969, p. 115-120, 175-179 (1970). (MERA 10, 1)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756820019-2"

I-21102-65

ASSOCIATION NR: AF50000000

pr. M. Kurnikov's article "Properties and uses of the new polymer" (in Russian)

"...and the author thanks his colleagues from the Institute of Polymers, S. N. V. M. Belonog, V. N. Martynchenko, Yu. M. Popovskiy, and V. I. Mal'nik for varied assistance in the work." Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: None

SUBMITTED: 27Dec63

ENCL: 00

SUB CODE: OP

NR RIF SOV: 017

LCNLS: 01